Smoke Detector Teardown

For our reverse engineering project, we chose to use the smoke detector. This smoke detector consists of a sensor to detect smoke and a loud electronic buzzer to alert people within the building.

Written By: Ari Dubinsky



INTRODUCTION

For our reverse engineering project, we chose to use the smoke detector. This smoke detector consists of a sensor to detect smoke and a loud electronic buzzer to alert people within the building.

TOOLS:

- Soldering Workstation (1)
- Desoldering Braid (1)

PARTS:

- 2.5 mm Flathead Screwdriver (1)

Step 1 — Smoke Detector Teardown



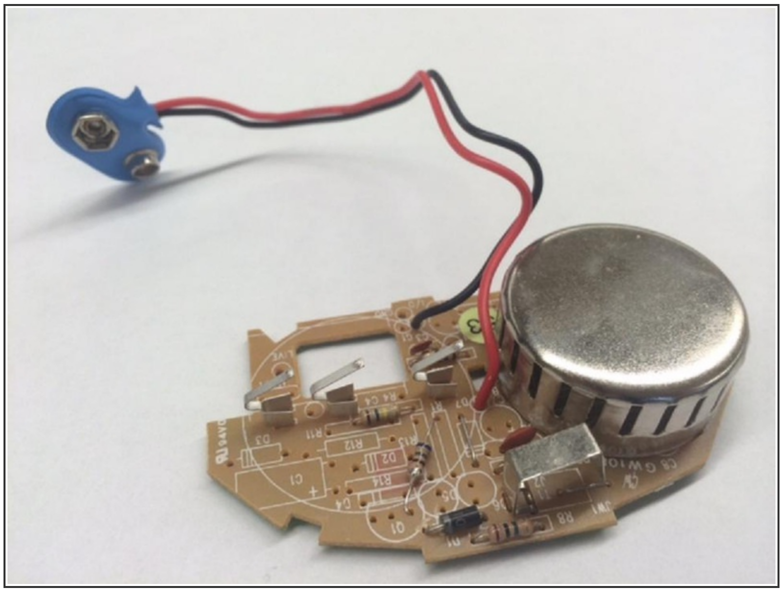

- Use a screwdriver to pry open the plastic enclosure. It might be easier to push the buzzer through the hole, if you need extra leverage.

Step 2



- The buzzer is unhooked from the PCB board, by hands.

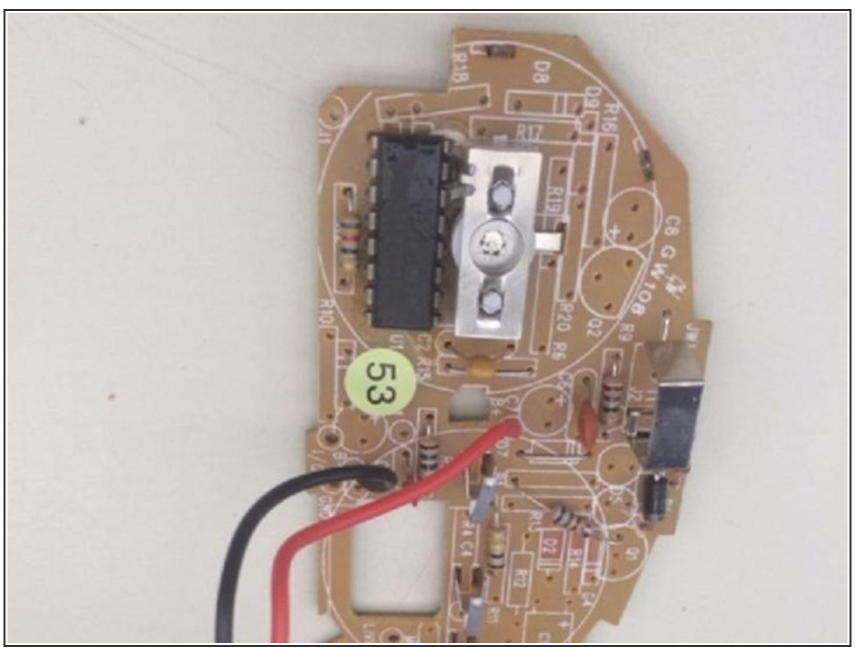
Step 3





- This is the circuit for the smoke detector. It is powered by a 9V battery. The 3 metal leafs are contacts for the buzzer and the bigger leaf is for the test button.

Step 4



⚠ The metal cap is removed to reveal a, MC145017, driver chip and americium sensor. Do not remove americium from the sensor!

To reassemble your device, follow these instructions in reverse order.

This document was last generated on 2017-06-22 01:29:11 AM.